

POWERED FLIGHT ONE

Ground handling, preflight inspection, takeoff and landing

Syllabus # 6

Estimated time: 0.7 hour.

1. Ground handling.

Demonstrate the proper way to ground handle the airplane. Emphasize surface areas of the airplane that should not be touched during ground handling.

2. Preflight inspection.

a. Using the appropriate checklist, demonstrate a routine preflight inspection of the airplane (*Aerospace Dimensions*, Module 1, "Introduction to Flight," Page 25).

b. Discuss the required documents that must be on board the airplane.

c. During the airplane preflight inspection, point out specific parts of the airplane and identify its function.

3. Before takeoff:

a. Using the checklist, show cadets the routine cockpit checks prior to takeoff.

b. Explain the sequence of events prior to takeoff.

4. Takeoff:

a. Discuss airplane position during takeoff roll and initial climb and demonstrate rudder controls.

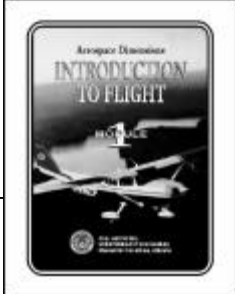
b. Describe emergency actions to be taken at different altitudes as discussed during accomplishment of the before takeoff checklist.

5. In flight (at least 2,500 feet AGL):

a. Discuss the use of flight controls in flight.

b. Point out the attitude of the airplane in relation to the horizon and different airspeeds.

Refer to *Aerospace Dimensions* module 1: Introduction to Flight.



c. Point out familiar landmarks, prominent ground features, and the position of the airport with respect to airplane's altitude and position.

6. Approach to landing:

a. Explain the approach to the traffic pattern. Explain the reasons for a standardized entry procedure and perform the before landing check.

b. Discuss the elements of the traffic pattern.

c. Discuss the final approach and the importance of maintaining the appropriate airspeed.

7. Landing and rollout:

a. Explain the landing attitude.

b. Point out the correct procedure for landing rollout.

8. Post flight: Answer questions pertaining to the flight and stress safety.